OIPE JC54
AUG 26 2005
PATENT & TRADEMARK OFFICE



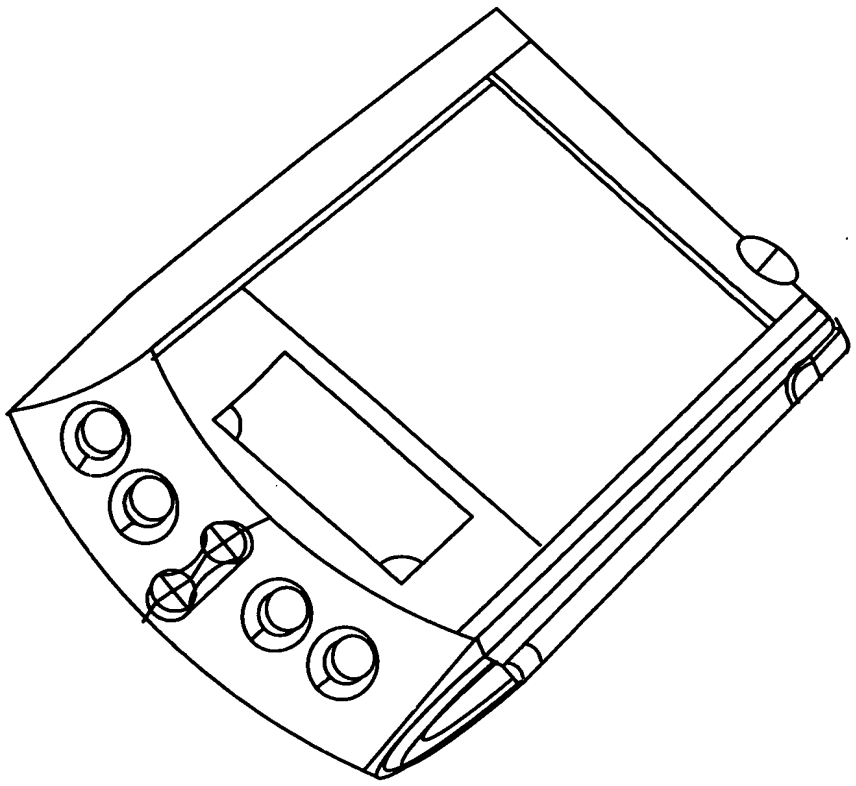

FIGURE 1
(PRIOR ART)

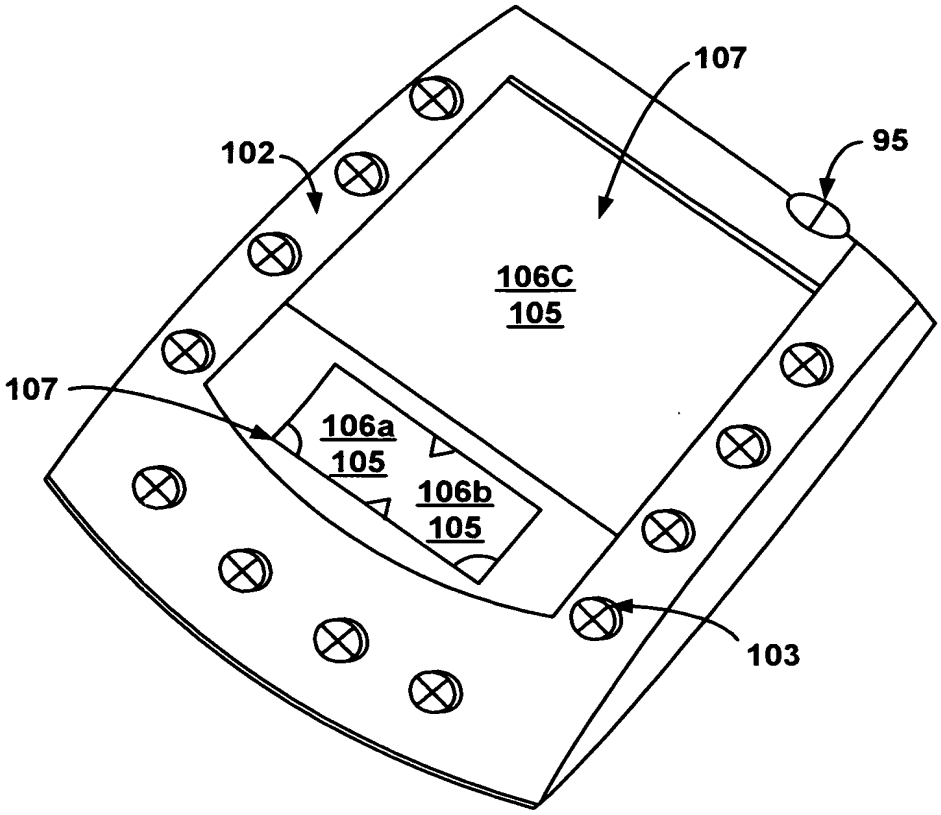


FIGURE 2A

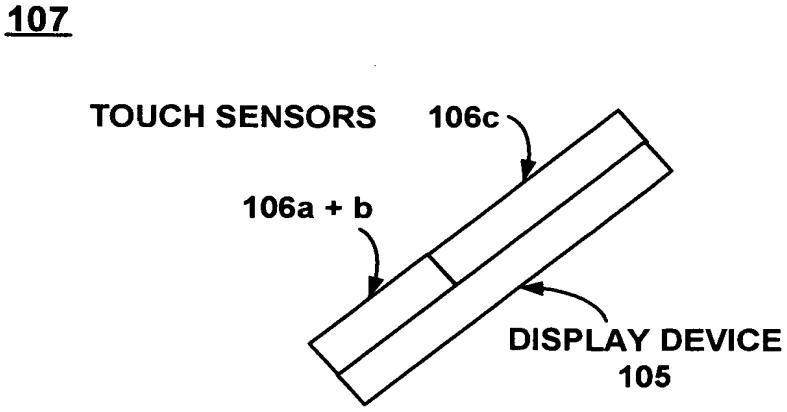


FIGURE 2B

100b

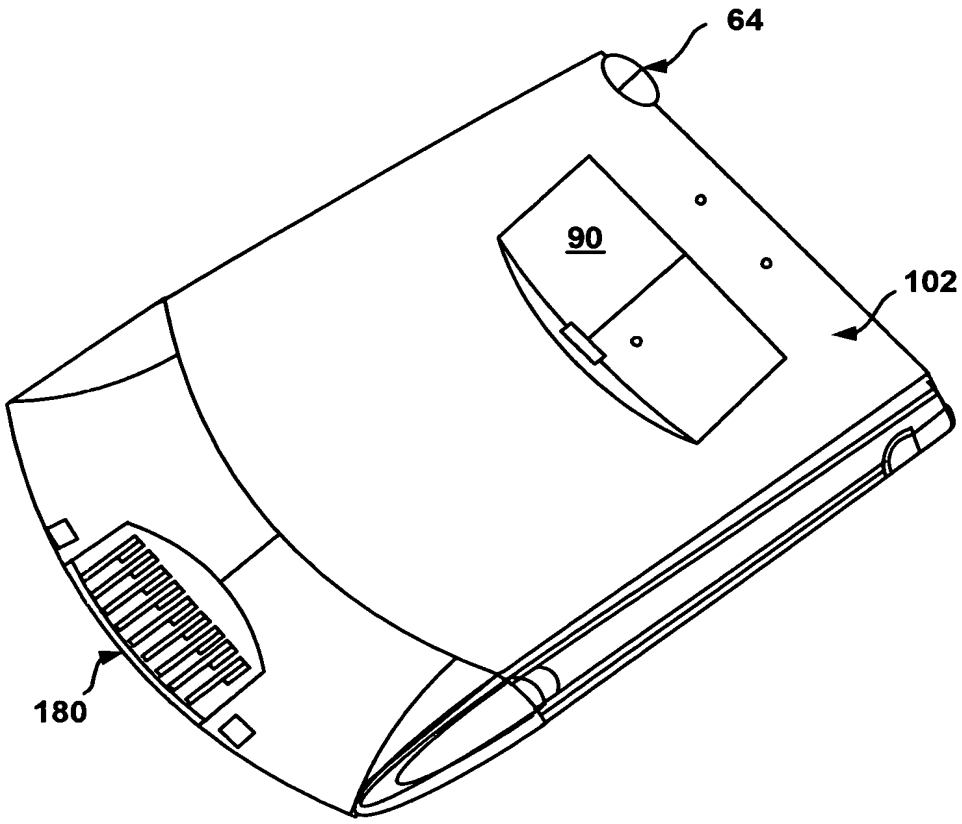


FIGURE 3

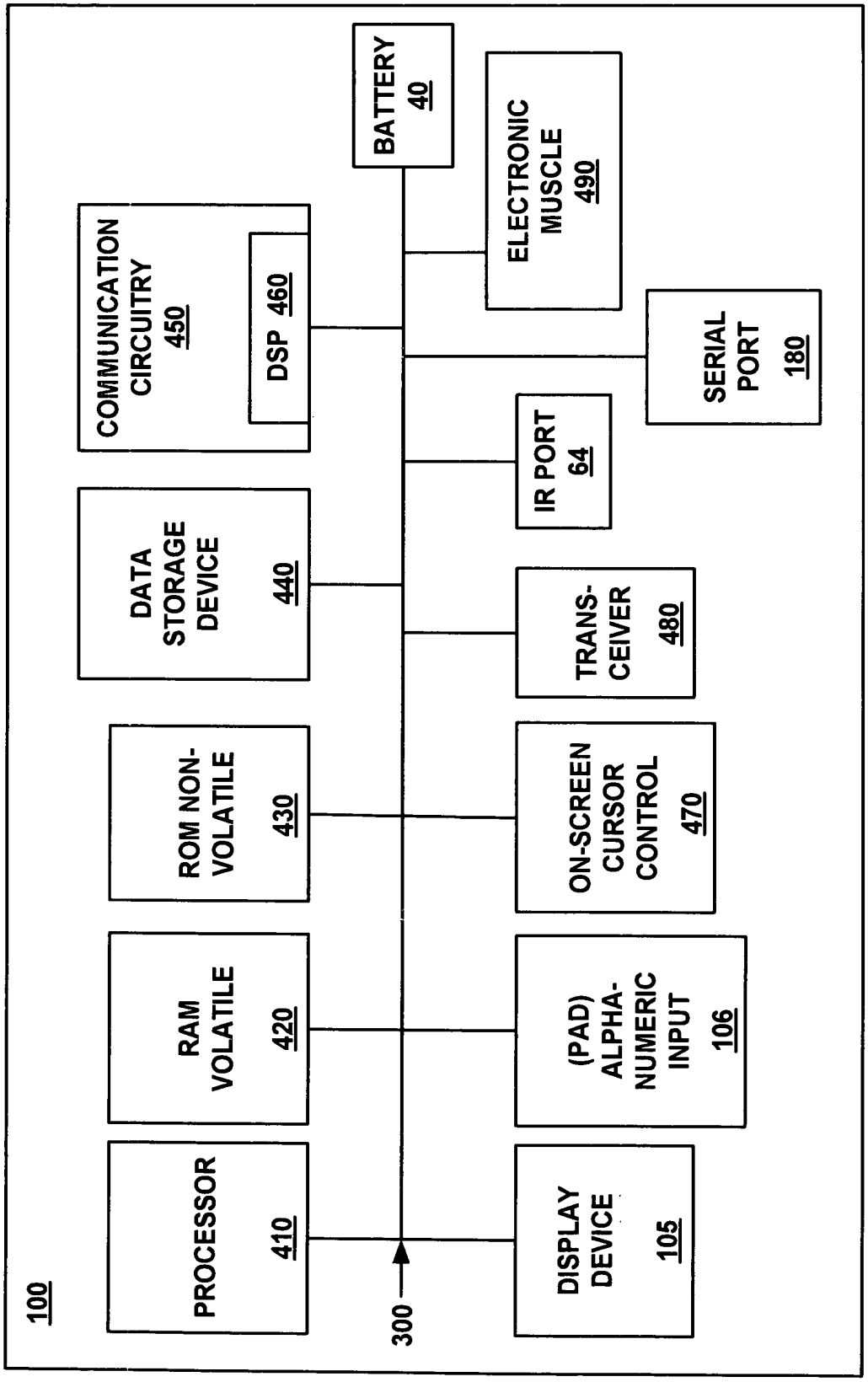
100
PROCESSOR 410
RAM VOLATILE 420
ROM NON-VOLATILE 430
DATA STORAGE DEVICE 440
COMMUNICATION CIRCUITRY 450
DSP 460
BATTERY 40
ELECTRONIC MUSCLE 490
SERIAL PORT 180
IR PORT 64
TRANS-CEIVER 480
ON-SCREEN CURSOR CONTROL 470
(PAD) ALPHA-NUMERIC INPUT 106
DISPLAY DEVICE 105
300

FIGURE 4

500

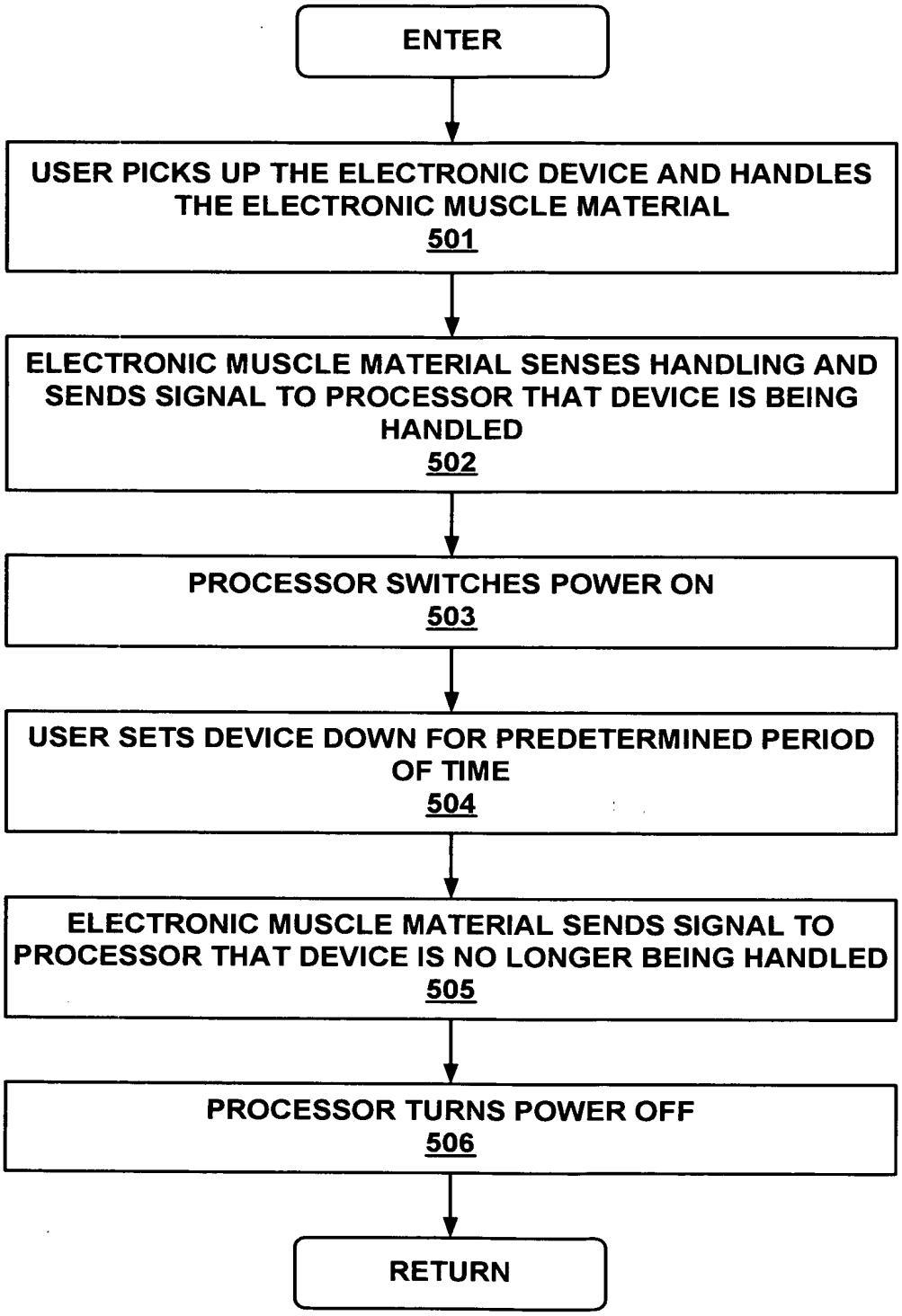


FIGURE 5A

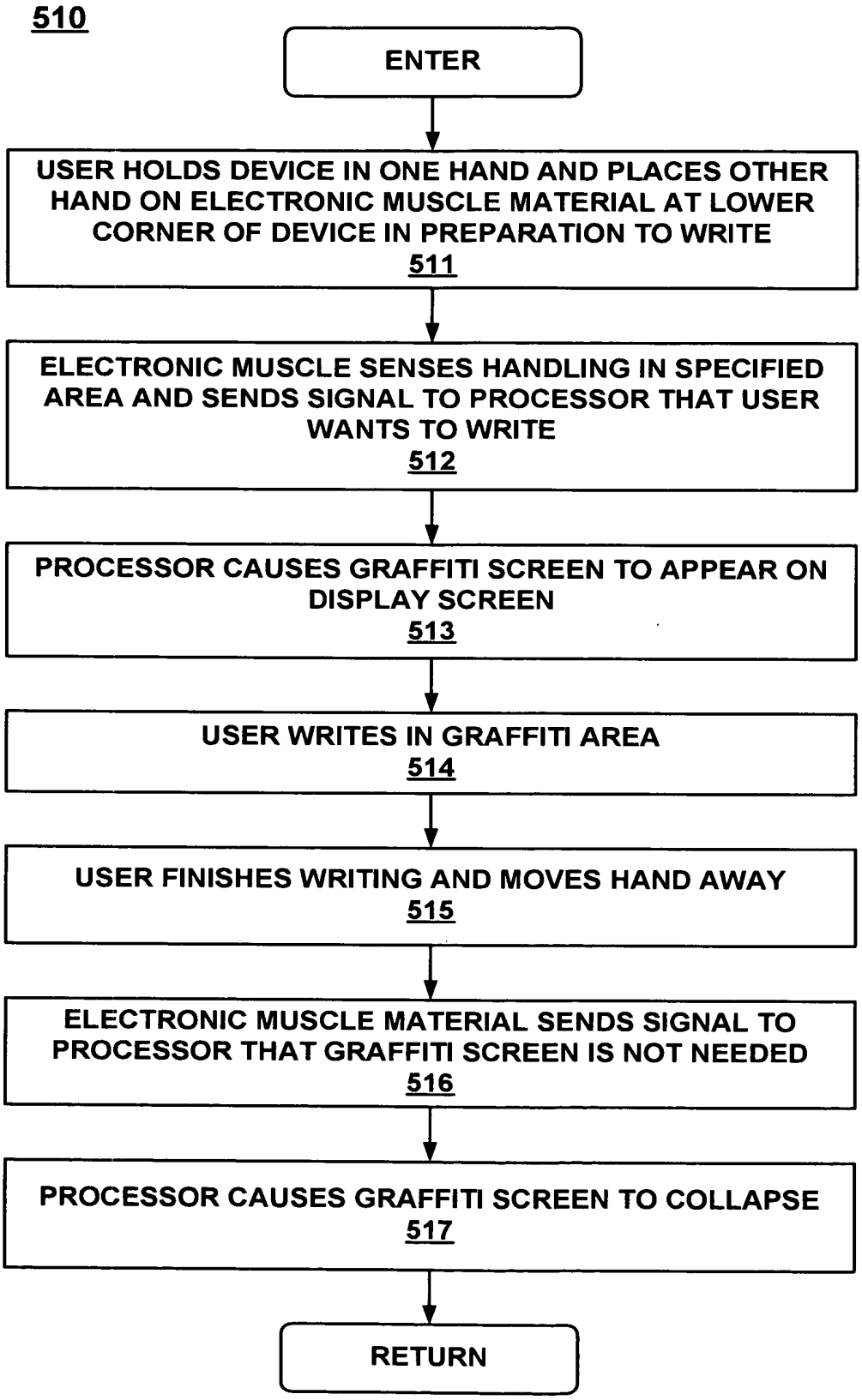
510
ENTER
USER HOLDS DEVICE IN ONE HAND AND PLACES OTHER HAND ON ELECTRONIC MUSCLE MATERIAL AT LOWER CORNER OF DEVICE IN PREPARATION TO WRITE
511
ELECTRONIC MUSCLE SENSES HANDLING IN SPECIFIED AREA AND SENDS SIGNAL TO PROCESSOR THAT USER WANTS TO WRITE
512
PROCESSOR CAUSES GRAFFITI SCREEN TO APPEAR ON DISPLAY SCREEN
513
USER WRITES IN GRAFFITI AREA
514
USER FINISHES WRITING AND MOVES HAND AWAY
515
ELECTRONIC MUSCLE MATERIAL SENDS SIGNAL TO PROCESSOR THAT GRAFFITI SCREEN IS NOT NEEDED
516
PROCESSOR CAUSES GRAFFITI SCREEN TO COLLAPSE
517
RETURN

FIGURE 5B

520

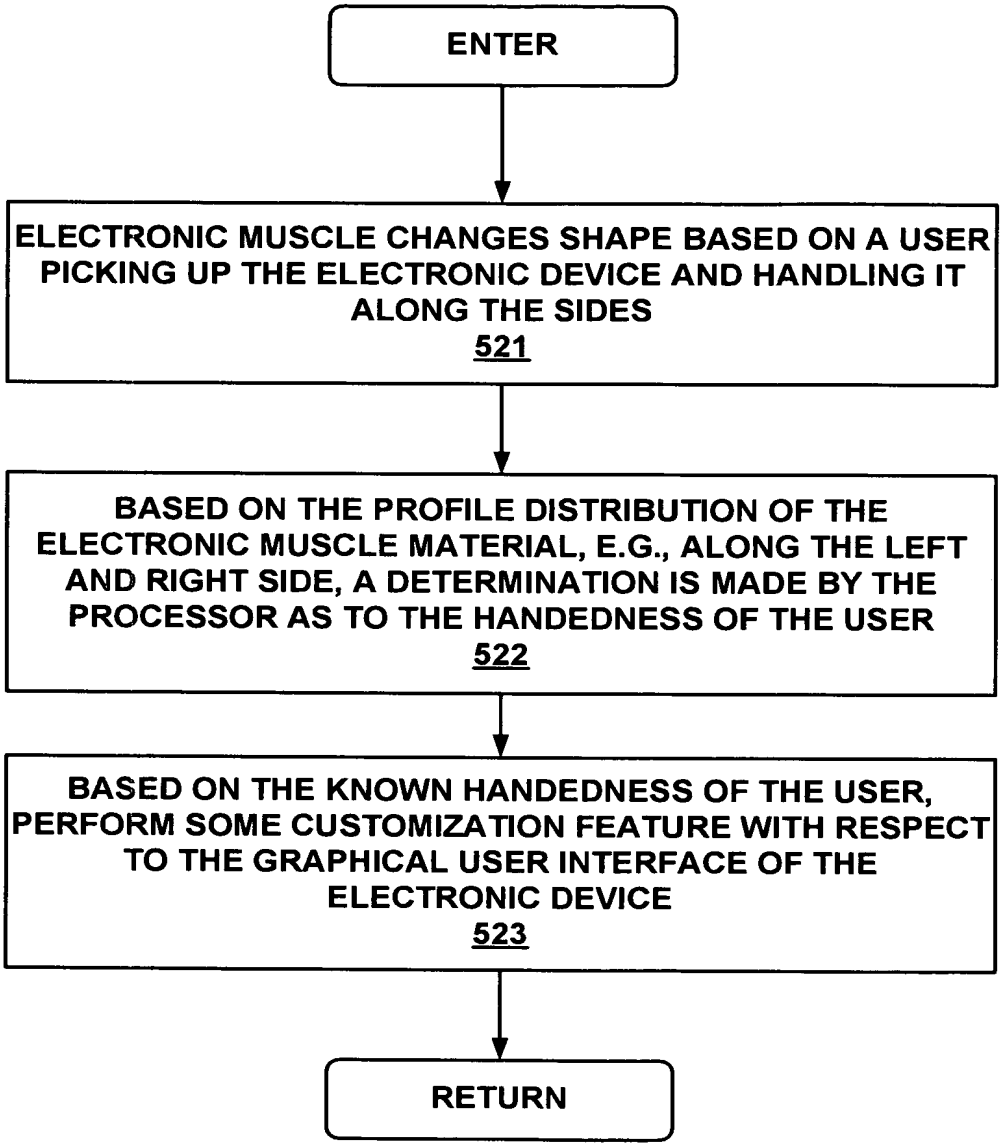


FIGURE 5C

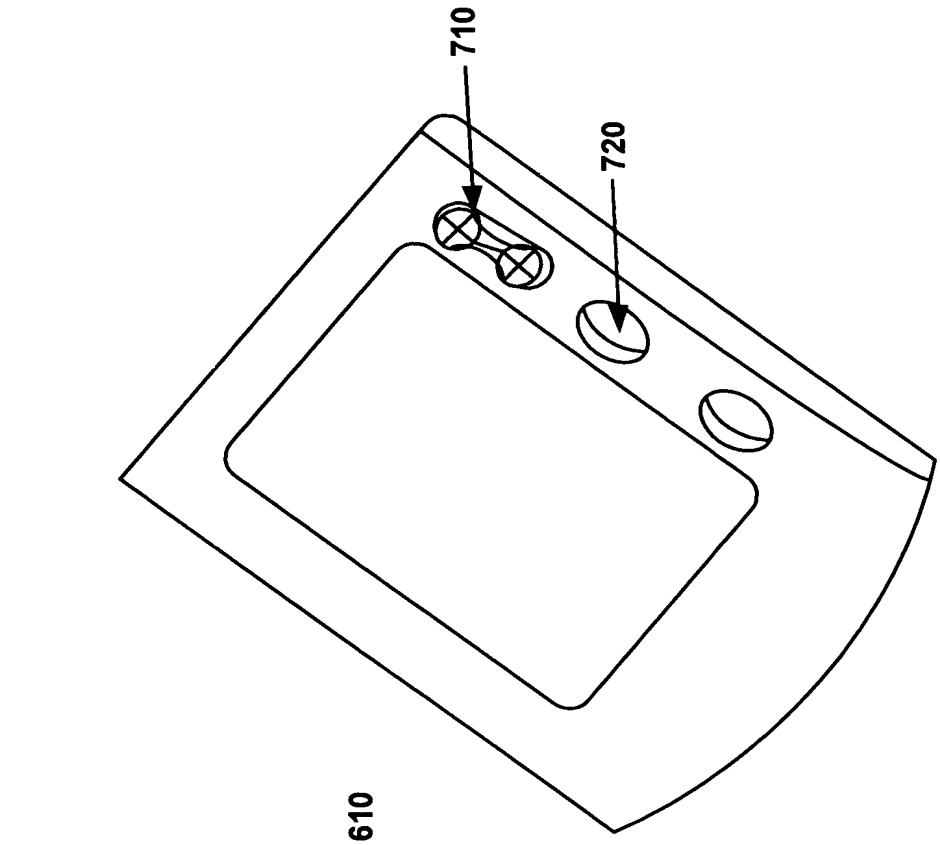


FIGURE 7

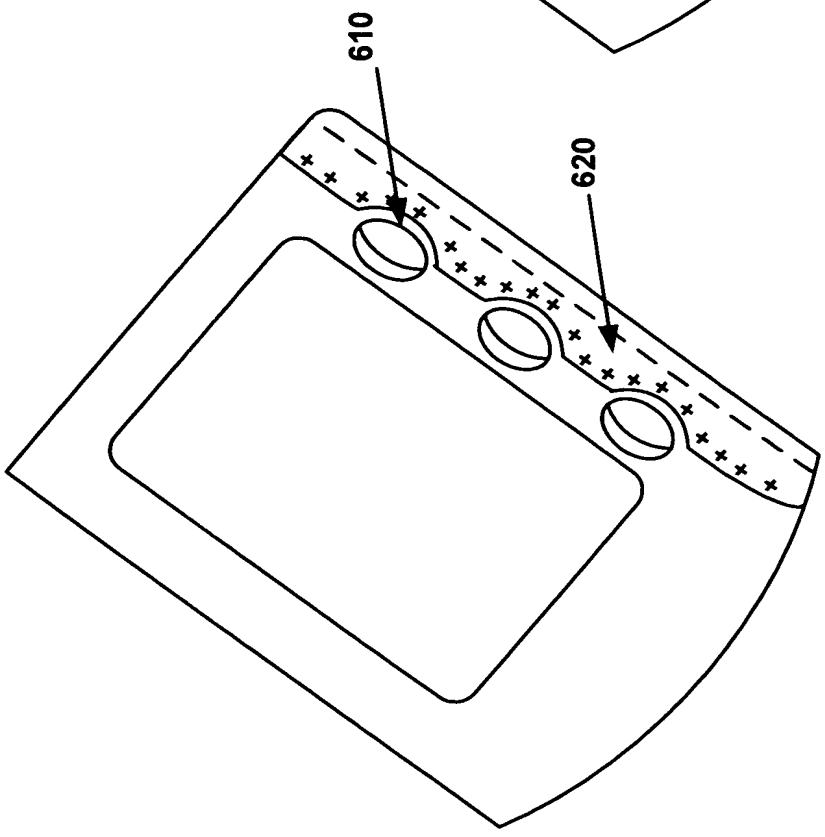


FIGURE 6

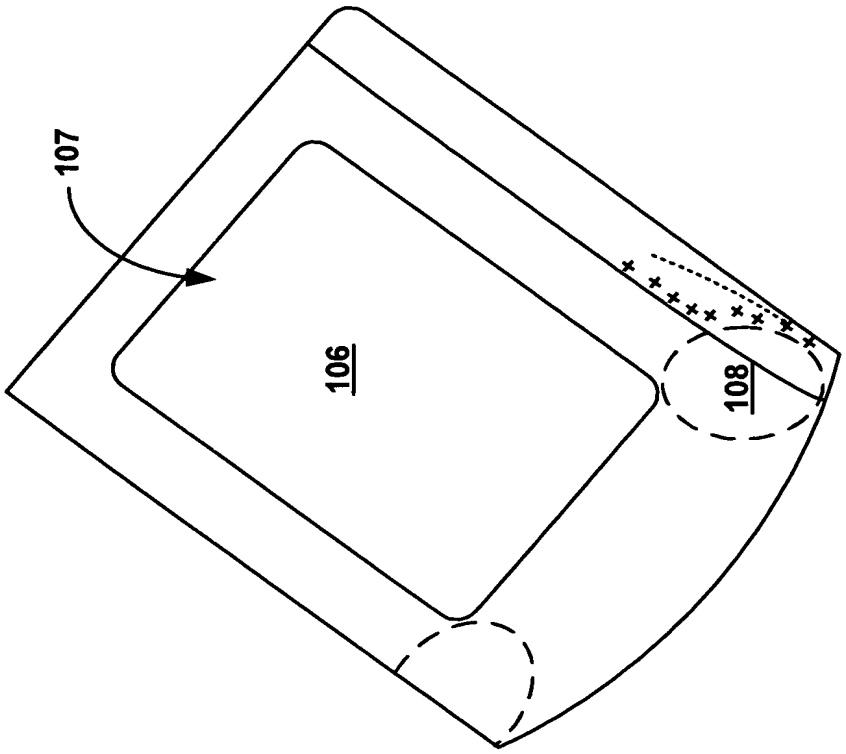


FIGURE 8

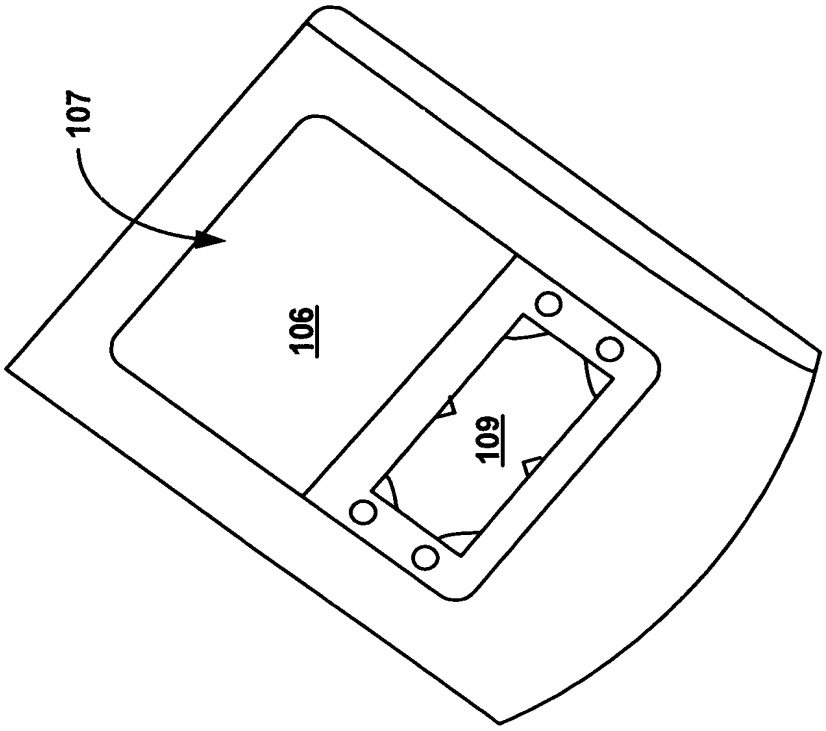


FIGURE 9

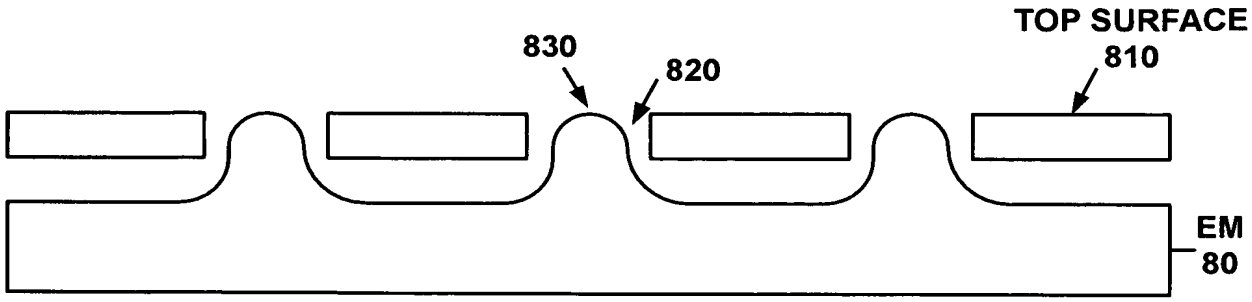


FIGURE 10A

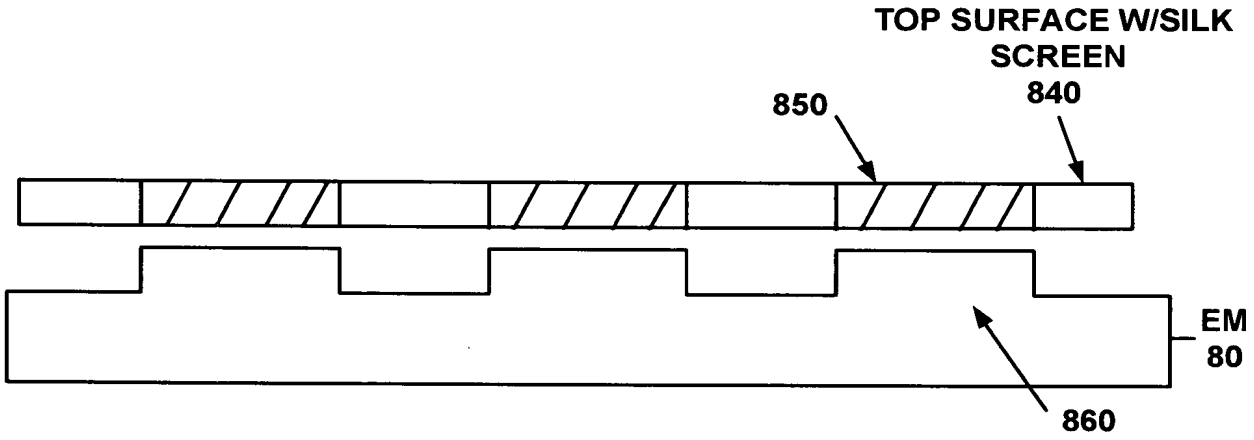


FIGURE 10B

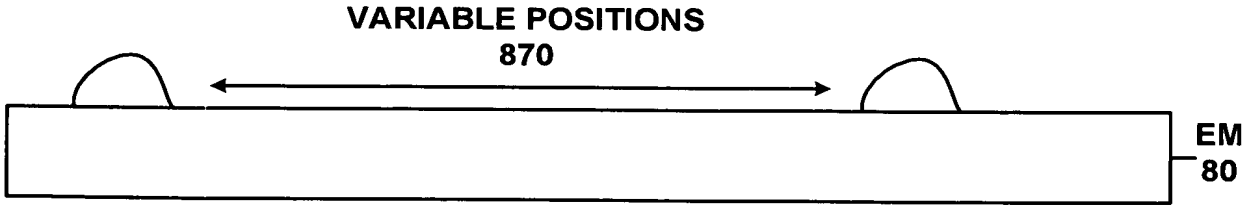


FIGURE 10C

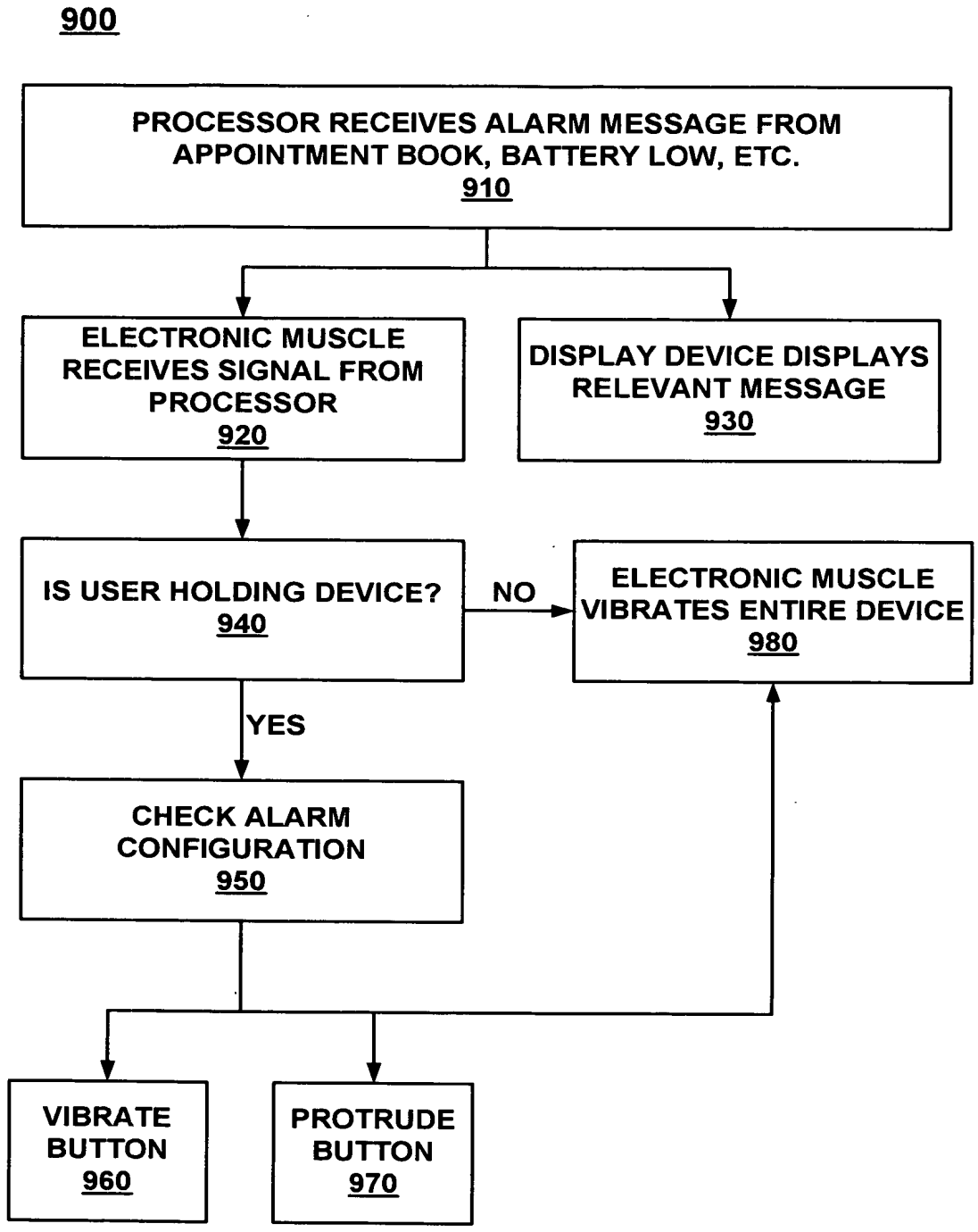
900
PROCESSOR RECEIVES ALARM MESSAGE FROM APPOINTMENT BOOK, BATTERY LOW, ETC.
910
ELECTRONIC MUSCLE RECEIVES SIGNAL FROM PROCESSOR
920
DISPLAY DEVICE DISPLAYS RELEVANT MESSAGE
930
IS USER HOLDING DEVICE?
940
NO
ELECTRONIC MUSCLE VIBRATES ENTIRE DEVICE
980
YES
CHECK ALARM CONFIGURATION
950
VIBRATE BUTTON
960
PROTRUDE BUTTON
970

FIGURE 11

1200

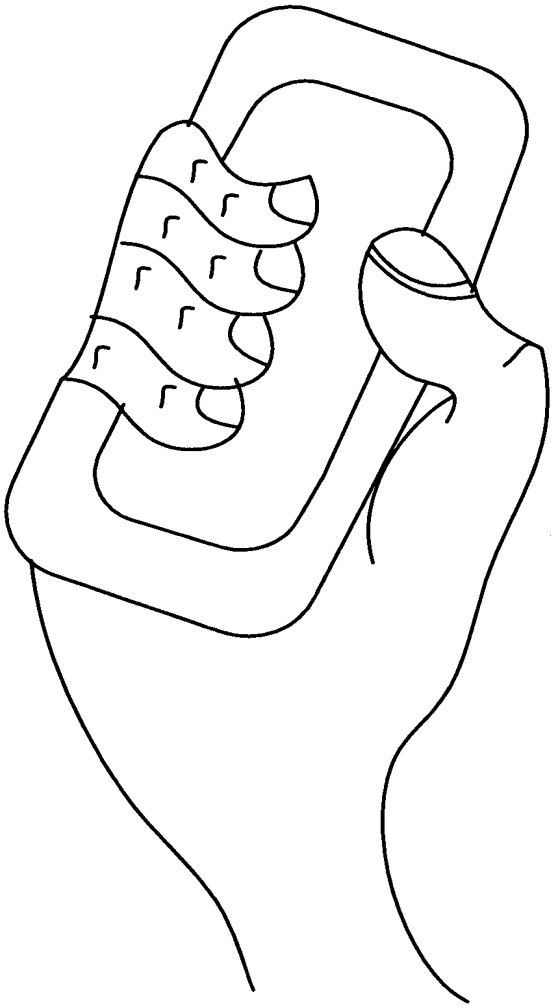

FIGURE 12

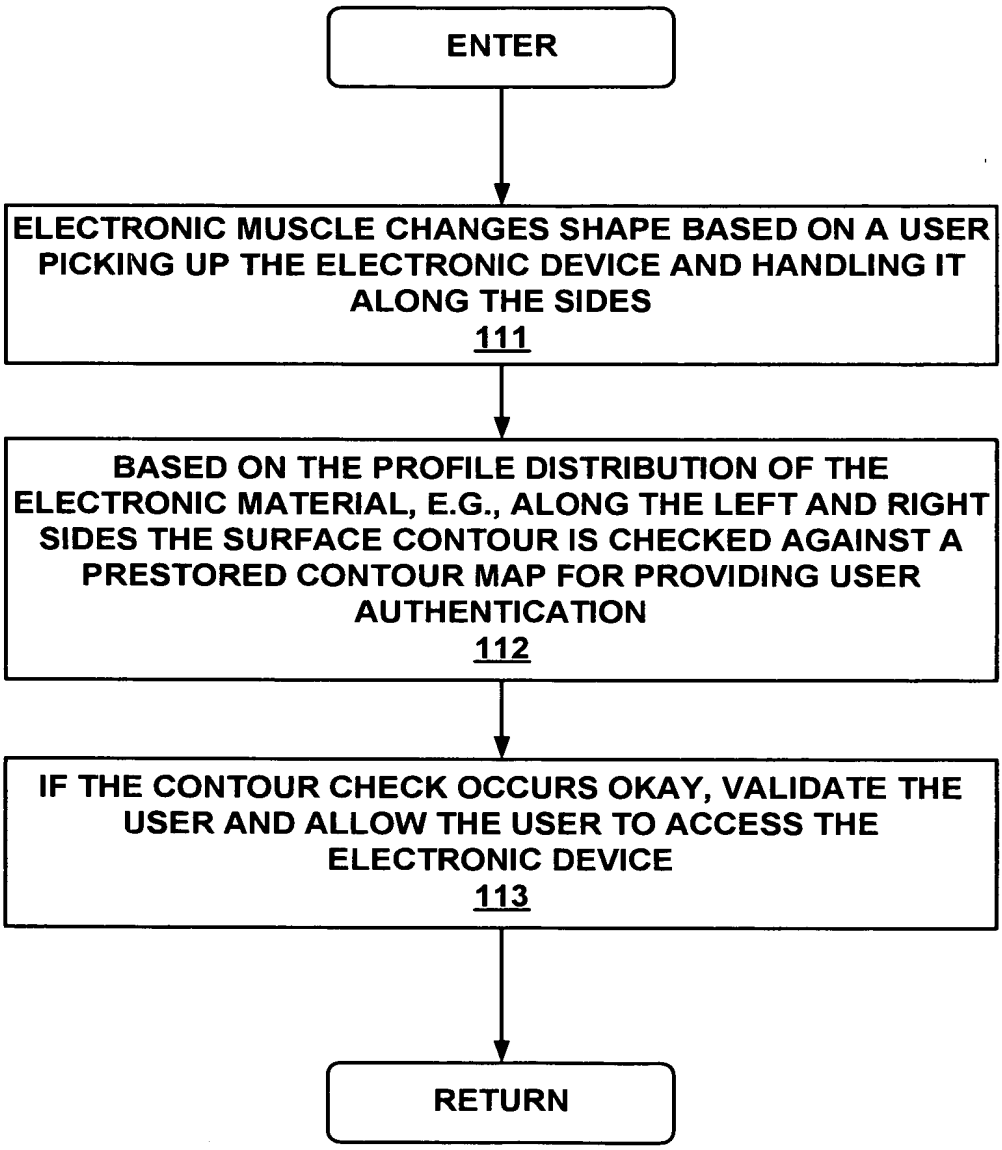
ENTER
ELECTRONIC MUSCLE CHANGES SHAPE BASED ON A USER PICKING UP THE ELECTRONIC DEVICE AND HANDLING IT ALONG THE SIDES
111
BASED ON THE PROFILE DISTRIBUTION OF THE ELECTRONIC MATERIAL, E.G., ALONG THE LEFT AND RIGHT SIDES THE SURFACE CONTOUR IS CHECKED AGAINST A PRESTORED CONTOUR MAP FOR PROVIDING USER AUTHENTICATION
112
IF THE CONTOUR CHECK OCCURS OKAY, VALIDATE THE USER AND ALLOW THE USER TO ACCESS THE ELECTRONIC DEVICE
113
RETURN

FIGURE 13

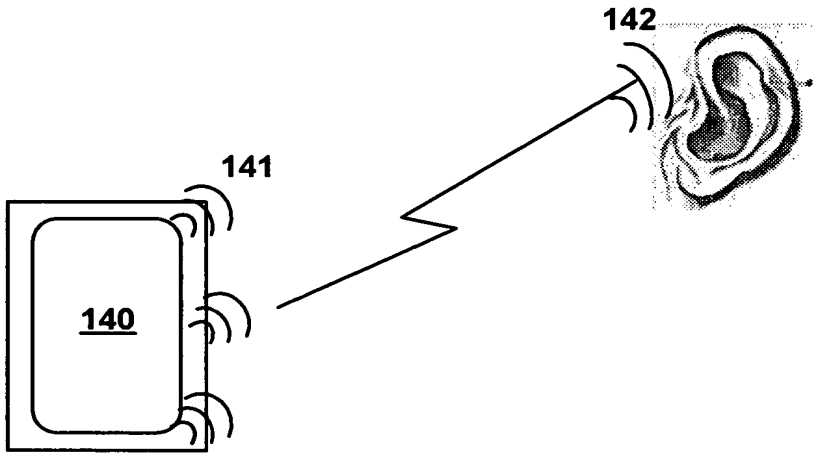


FIGURE 14

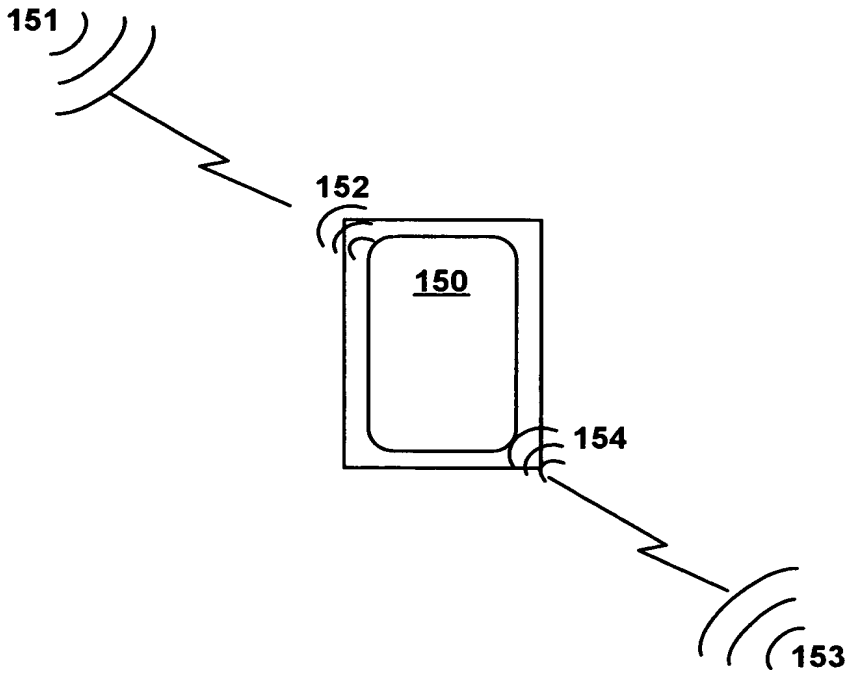


FIGURE 15